

OPTICAL NETWORK WITH SUB-BAND  
REJECTION AND BYPASS

ABSTRACT OF THE DISCLOSURE

A method of transporting traffic on an optical ring includes, at one or more nodes coupled to the optical ring, splitting an incoming signal (including traffic in a plurality of sub-bands) into a first signal and a second signal. The first signal includes

5      the traffic in a first sub-band of traffic channels and the second signal includes the traffic in the remaining sub-bands of traffic channels of the incoming signal. The method also includes receiving the traffic in the first sub-band at a bypass element, rejecting the traffic in a first portion of the first sub-band at the bypass element, and forwarding the traffic in a second portion of the first sub-band at the bypass element.

10     In addition the method includes, combining the traffic in the second signal with the traffic in the second portion of the first sub-band for transport on the network.